WN-16J

## **CERTIFIED MAIL**

## RETURN RECEIPT REQUESTED

DRAFT

Paul Novak, Manager Surface Water Division Ohio Environmental Protection Agency P.O. Box 1049 Columbus, Ohio 43216-1049

Re: U.S. Environmental Protection Agency Objection to Proposed NPDES Permit, American Energy Corporation/Century Mine (Bennoc Refuse Disposal Area), Alledonia, Ohio, Permit No. OIL00159\*AD, Application No. OH0144576

Dear Mr. Novak:

The U.S. Environmental Protection Agency (EPA) has reviewed the Proposed National Pollutant Discharge Elimination System Permit (Permit) and Public Notice/Fact Sheet, dated October 8, 2013 and received by EPA on October 17, 2013. We have also reviewed the supporting documents for the subject facility received by EPA on October 17, 2013.

In accordance with 40 C.F.R. § 123.44, and for the reasons set forth in this letter, EPA is objecting to the proposed permit. As provided by 40 C.F.R. § 123.44(b)(2)(ii), we are indicating the actions that must be taken by the State to eliminate the objections, including conditions which the permit would include if it were issued by EPA. Based on our review, we have the following Objections:

1. The Permit does not contain the appropriate limit for sulfate, in order to be protective of the water quality criterion for the receiving stream. (40 C.F.R. § 122.44(d))

EPA would include an effluent limitation for sulfate in the permit of 1684mg/L. This limitation was derived using OEPA's spreadsheet which had the following formula: Acute WQS for Sulfate= [1276.7+5.508(hardness) - 1.457(chloride)]\*0.65. EPA used the same inputs as AEC, which were the average of values from the OEPA online water quality map for Piney Creek at State Route 148: hardness = 283; chloride = 168. EPA would consider protecting the unnamed tributary as well as

Piney Creek. The sulfate standard of 1684 mg/L will be applied as the sulfate limit because the permit and supporting information did not contain sufficient information (i.e., flows, flow determination methods, receiving stream water chemistry data) to estimate available dilution and assimilative capacity.

2. The Permit does not contain a numeric limit for TDS and does not limit the length of discharge and, therefore, does not protect the receiving water regarding chronic exposure. (40 C.F.R. § 122.44(d))

EPA would include monthly average and maximum daily water quality based effluent limits for TDS based on Ohio's numeric water quality standard of 1500 mg/L. If the applicant wishes to pursue an intermittent discharge scenario as an enforceable provision in the Permit, EPA may agree to alternative methods of implementing the TDS standard. To ensure protection based on chronic exposure, such an alternative method must be consistent with federal regulations and guidance.

3. The Permit does not contain a limit for TDS and does not contain an adequate restriction on discharge.

OEPA's Captina Creek Watershed Report DSW/EAS 2010-4-1, which includes the receiving waters for this Permit, Piney Creek and unnamed tributaries, notes macro-invertebrate communities are significantly less diverse in lower Piney Creek than in similar Captina Creek tributaries and notes the absence of mayflies due to mine discharges in the watershed. OEPA, during its consideration of the WLA for TDS in setting this Permit's limits and conditions, must include a restriction to discharges during low flow conditions to address cumulative impacts to receiving waters.

4. The monitoring frequencies for Pond#023 and 024, for several parameters, of once every 2 weeks, is insufficient and inconsistent with monitoring frequencies for Pond #002 for same parameters at twice a week. (40 C.F.R. § 122.44(C)(3)

EPA would increase Pond #001 monitoring frequencies to twice a week for: pH, TSS, chloride, sulfate, selenium, iron and manganese.

5. The Permit does not contain limits or requirements for Whole Effluent Toxicity (WET) monitoring and testing.

EPA would include a limit for acute toxicity if the discharge regime is noncontinuous and for chronic toxicity if a continuous discharge regime is contemplated.

6. The Permit, as currently written, does not sufficiently ensure assessment for effluent impacts to receiving streams' aquatic biota, if the discharge is of a continuous nature.

In order to ensure that the narrative standard of no toxics in toxic amounts is implemented in the Permit, EPA would require in-stream bio-monitoring upstream and downstream of the discharge in Piney Creek. The Permit would require biological and water quality sampling and monitoring in Piney Creek upstream and downstream of where the Bennoc Area discharges come into Piney Creek. Upstream sampling and monitoring locations would be required downstream of impacts from other discharges. Additionally, sampling and monitoring would be required in accordance with OEPA and EPA procedures and standard methods.

Sampling and monitoring would include;

- i. Stream Habitat Evaluation,
- ii. Physical Habitat Evaluation,
- iii. Biological Community Assessment, and
- iv. Surface Water Chemistry

Water sample collection would be required in accordance with appropriate methods, as outlined in Parts II and III of the Manual of Ohio EPA Surveillance Methods and Quality Assurance Practices. Water parameters to be sampled for must include; sulfate, total suspended solids (TSS), total dissolved solids (TDS), acidity, alkalinity, conductivity, chloride, pH, dissolved oxygen, hardness, and the following metals: aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium (total), chromium (hexavalent), cobalt, copper, iron, lead, manganese, magnesium, mercury, nickel, potassium, selenium\*, silver, sodium, thallium, vanadium, zinc, cyanide (total) and cyanide (amenable). Field measurements of dissolved oxygen, pH, temperature, and conductivity would be required. Analytical methods required would be in accordance with 40 C.F.R. Part 136 and OEPA's Manual of Laboratory Operating Procedures. \*Low level methods shall be used for Selenium, such that the quantification level is 1.0 ug/L.

v. Field Quality Control Samples

Quality control requirements are also found in the Manual of Ohio EPA Surveillance Methods and Quality Assurance Practices.

vi. EPA would include a permit condition to require submittal of a sampling

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and monitoring plan, and annual reports documenting findings and results.

Under 40 C.F.R. § 122.4(c) the State may not issue this permit over an EPA objection. We look forward to working with OEPA as it revises the permit to resolve these objections and to ensure that it complies with the CWA and EPA's implementing regulations. In accordance with 40 C.F.R. § 123.44(e), the State or any interested person may request that a public hearing be held by the Regional Administrator on these objections. Following such a hearing, if one is held, the Regional Administrator will reaffirm the original objection, modify the terms of the objection, or withdraw the objection. The Regional Administrator may issue the permit if OEPA does not timely resubmit a permit revised to meet EPA's objections consistent with 40 C.F.R. § 123.44. If you have any questions please contact Janet Pellegrini, of my staff, at (312) 886-4298 or by Email at pellegrini.janet@epa.gov.

Sincerely,

Tinka G. Hyde Director, Water Division

Enclosure???

cc: American Energy Corporation (Certified Mail Return Receipt to: 43521 Mayhugh Road, Beallsville, OH 43716)

Eric Nygaard, Permit Writer, OEPA

bc: Janet PellegriniReading File?Gary Prichard, Office of Regional CounselWECAB

G: /NPDES/FY'13 State Permit Reviews/Ohio Reviews/OH014456 - American Energy/Proposed ObjectionAEC10-17-13